

# INVITATION TO A GUEST LECTURE

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**Wolfgang Erb**

Dipartimento di Matematica, Università degli Studi di Padova, Italia

**“An Introduction to modelling and reconstruction in  
Magnetic Particle Imaging”**

📍 V.1.08

📅 Thursday, 6 June 2019

🕒 10:30 a.m.

## **Abstract**

In this talk, we give a short overview about Magnetic Particle Imaging, a quite recent biomedical imaging modality in which magnetic tracer particles can be tracked by their response to an external oscillating magnetic field. The imaging equations of this modality lead to a mathematically ill-posed inverse problem. We provide an analysis of this inverse problem in different imaging scenarios and describe some possibilities on how the reconstruction can be performed in an efficient way.

Christian Pötzsche and the Department of Mathematics look forward to seeing you at the talk!